201.2 - Biological Buffer Systems (powder form)

These SRMs are used to calibrate clinical instruments (e.g., blood pH measurements), in the physiologically important range of pH 7 to 8. They are based on a biological buffer system for clinical pH measurements and are each certified for use as an admixture only. The pH(S) values for the buffer solutions are certified at 0.05 molal and 0.08 molal with respect to the free acid and the sodium salt admixture as a function of temperature. The certified temperature range is from 0° C to 50° C.

Technical Contact: kenneth.pratt@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM Description Unit Size	2181 HEPES Free Acid (60 g)	2182 NaHEPESate (60 g)	2183 MOPSO Free Acid (50 g)	2184 NaMOPSOate (50 g)
pH(S) Values (at 37 C)				
0.05 molal	7.364		6.699	
0.08 molal	7.373		6.694	